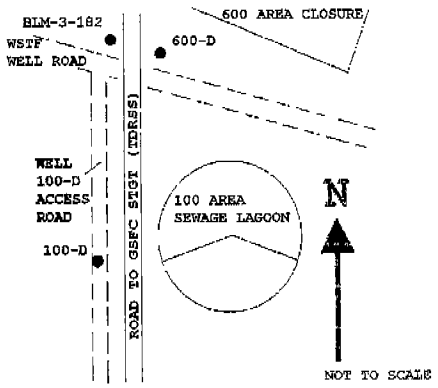
# WSTF BOREHOLE LITHOLOGIC LOG

LOCATION MAP:

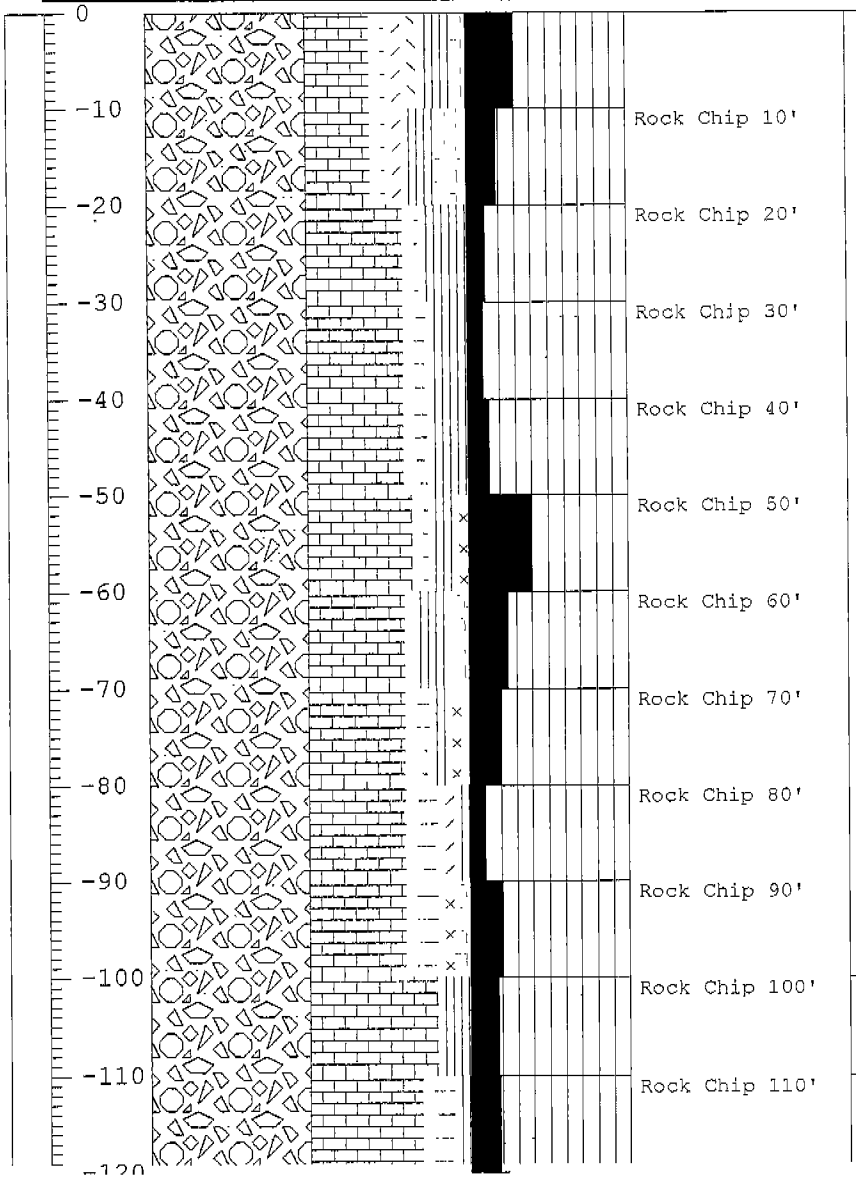



LOCATION DESCRIPTION:

| | | | |
|---|---|---|---|
| Quarter 1 | NE1/4 | Section | 3 |
| Quarter 2 | SE1/4 | Township | T21S |
| Quarter 3 | SE1/4 | Range | R3E |

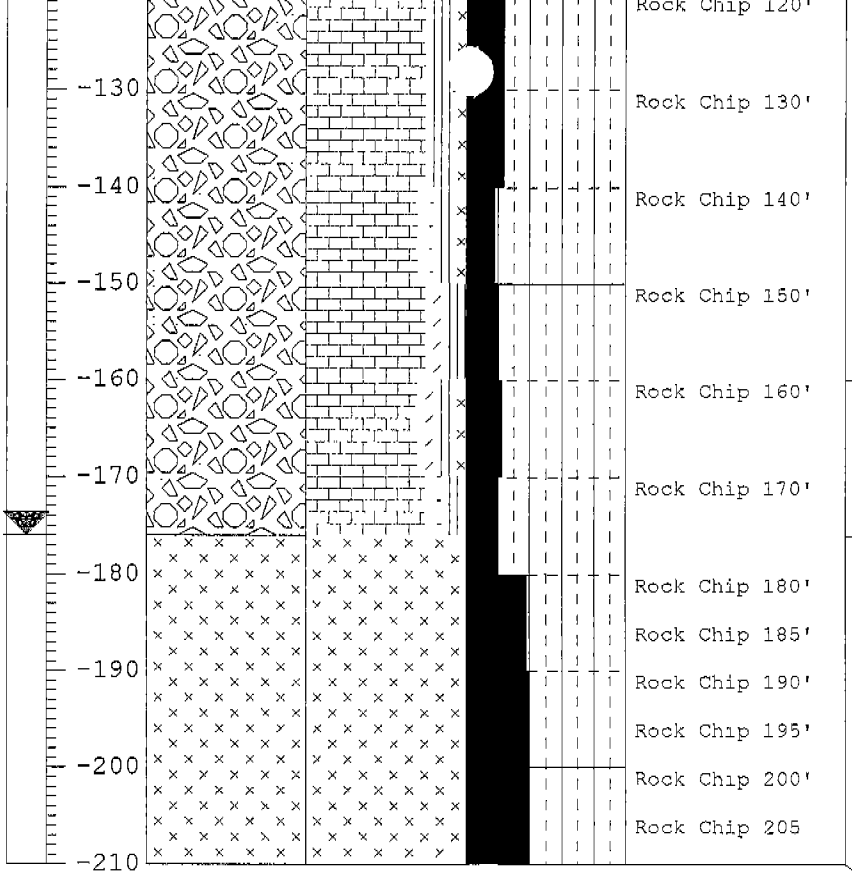
SITE ID: **NASA-JSC WSTF**
LOCATION ID: **Well 100-D**
SITE COORDINATES: **N224081.80, E413346.39**
GROUND ELEVATION: **4748.45 (Brass Cap)**
COUNTY AND STATE: **Dona Ana County, New Mexico**
DRILLING CONTRACTOR: **Stewart Brothers Drilling Co.**
DRILLING METHOD(S): **Mud rotary/air foam rotary**
DATES STARTED AND COMPLETED: **May 6, 1997 - May 15, 1997**
ATSC FIELD REPRESENTATIVES: **Russell/Giles/Pearson**
DEPTH TO BEDROCK AND TYPE: **176 Feet - Andesite**
DEPTH TO GROUNDWATER: **176 Feet**
TOTAL DEPTH OF BOREHOLE: **210 Feet**
COMMENTS: **- Mud rotary 17-inch tricone to 176 feet**
**- Set 10 3/4-inch surface casing to 176 feet**
**- Air foam 8 3/4-inch tricone to 210 feet**

| DEPTH (Feet) | LITHOLOGY | VISUAL PERCENT 0 100 | DRILLING RATE (Feet/Hr) 0 100 | SAMPLE TYPE | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|




ALLUVIUM: Santa Fe Group: Cuttings samples consist of polygenetic multi-colored clasts with localized clay-rich intervals. Color is variable between clast types depending on composition. Cuttings range in size from 2mm to 1.5 cm, and are fine gravel sized. Individual clasts are generally subangular, and angular where broken. The alluvium is an unconsolidated to poorly consolidated, non-sorted, poorly graded polygenetic pebble to boulder conglomerate. Intermittent clay-rich zones are noted in the log where present. Lithologies occurring in the alluvium are: limestone (grayish black (N2)); silty limestone and siltstone (dark yellowish orange (10YR 6/6)); rhyolite (reddish brown (10R 4/6)); granite (moderate pink (5R 7/4)), and; andesite (blackish red (5R 2/2).

: Limestone clasts locally increase to 80%, and are generally subangular to subrounded where not broken.




: Appearance of 10% dark purple-grey (5RP 3/2) subangular andesite clasts indicate potential proximity to bedrock.

ANDESITE: Orejon Andesite: Color ranges from greyish purple (5P 4/2) to greyish blue (5PB 4/2). Cuttings are angular, broken, and typically less than 1 cm in size. The texture of the andesite is generally aphanitic to microporphyritic. Microphenocrysts comprise 15% of the andesite and are generally tabular plagioclase feldspars to 1 mm in length. Trace calcite veinlets present in less than 5% of the cuttings. Calcite veinlet widths are less than 1 mm.